

**CLAIMS**

1. A polypeptide, characterized in that:
  - it is constituted by a unique or repeated peptide motif;
  - 5 • it comprises an amino acid sequence constituted by one or more different antibody fragment(s); and
  - it is capable of penetrating into cells.
2. A polypeptide according to claim 1, characterized in that it comprises a fragment of a heavy antibody chain.  
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3. A polypeptide according to claim 2, characterized in that it comprises all or a portion of the CDR3 region of an antibody.
4. A polypeptide according to claim 2, characterized in that it comprises all or a portion of the CDR2 region of an antibody.  
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5. A polypeptide according to claim 3 or claim 4, characterized in that it comprises all or a portion of the CDR3 region and all or a portion of the CDR2 region of an antibody.  
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6. A polypeptide according to claim 5, characterized in that it essentially consists of a fusion between the CDR3 region of an antibody and the CDR2 region of an antibody.
- 25 7. A polypeptide according to any one of the preceding claims, characterized in that it comprises at most 100 amino acids.
8. A polypeptide according to claim 7, characterized in that it comprises 3 to 60 amino acids, preferably 3 to 30 amino acids.  
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9. A polypeptide according to any one of the preceding claims, characterized in that the antibody fragment

is a fragment of an antibody capable of penetrating into cells.

10. A polypeptide according to claim 9, characterized in that the antibody fragment is a fragment of a polyreactive antibody.
11. A polypeptide according to claim 10, characterized in that the antibody fragment is a fragment of an anti-DNA antibody.
12. A polypeptide according to claim 1, characterized in that it comprises a region with a sequence selected from SEQ ID n° 1, 2, 3 and 8, or any functional homologue.
13. A polypeptide according to claim 1, characterized in that it is also capable of causing a substance to penetrate into a cell.
14. Use of a polypeptide according to any one of the preceding claims, to transfer substances into cells.
15. A polypeptide according to any one of claims 1 to 13, characterized in that it is coupled to a substance.
16. A vector for transferring a substance into a cell, characterized in that it comprises a polypeptide according to any one of claims 1 to 13 to which said substance is coupled.
17. A vector according to claim 16, characterized in that the coupling is a covalent coupling.
18. A vector according to claim 17, characterized in that coupling is effected by a maleimide, succinimide, peptide, disulphide, amine, acid, biotin-streptavidin or p-benzoquinone type bond.
19. A vector according to claim 16, characterized in that said substance is a nucleic acid.

20. A vector according to claim 16, characterized in that said substance is a protein.
21. A vector according to claim 16, characterized in that said substance is a drug.
- 5 22. A vector according to claim 16, characterized in that said substance is an antigen.
23. A eukaryotic cell containing a polypeptide according to any one of claims 1 to 20.
24. A eukaryotic cell containing a vector according to  
10 Claim 16.
25. A method for transferring a substance into a cell *in vitro*, comprising:
- coupling said substance to a polypeptide as defined in claim 1, and
  - 15 • incubating the cell with the product of said coupling.
26. A pharmaceutical composition comprising a vector according to claim 16 in which the substance is an active principle of a drug, in association with a  
20 physiologically acceptable vehicle.
27. A vaccine comprising a vector according to claim 16 in which the substance is an antigen, in association with a physiologically acceptable vehicle.